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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,758	07/26/2001	Bradley A. Cleveland	M93.12-0265	7480
7590	04/20/2004		EXAMINER	JOHNSON, JONATHAN J
Deirdre Megley Kvale Westman, Champlin & Kelly International Centre, Suite 1600 900 Second Avenue South Minneapolis, MN 55402-3319			ART UNIT	PAPER NUMBER
			1725	
			DATE MAILED: 04/20/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/915,758	CLEVELAND ET AL.
	Examiner	Art Unit
	Jonathan Johnson	1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 15 January 2002.  
 2a) This action is **FINAL**.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) 1-8, 15, 16 and 21 is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 9-14 and 17-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) 1-21 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
     Paper No(s)/Mail Date 1-15-02.

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-8, 15, 16 and 21 are drawn to an article, classified in class 428, subclass 34.1.
- II. Claims 9-14 and 17-20 are drawn to a method of forming a tubular shaped article, classified in class 228, subclass 112.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group II and Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a different process such as forming the tubular body by pouring the metal into a mold of the desired shape.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

During a telephone conversation between Deirdre Kvale and Examiner Patricia Nordmeyer on 10/1/02 a provisional election was made with traverse to prosecute the invention of Group II, claims 9-14 and 17-20. Affirmation of this election must be made by applicant in

replying to this Office action. Claims 1-8, 15, 16 and 21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-11 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 03-254359 (Akio). Akio teaches depositing a metal powder in patterned layer deposition on a metal workpiece (Figure 2, items 8 and 9); and forming a tubular body portion from the metal workpiece (Figure 1, item 6); contour forming the metal workpiece about a mandrel using heat and pressure (Figure 1, items 5 and 6); contour forming the plurality of workpiece sections using heat and pressure; and joining the plurality of workpiece sections to form the tubular body portion (Figure 1, items 5 and 6); and prior to forming the tubular body portion further comprising the step of depositing metal powder in a patterned layer deposition on opposed surfaces of the metal workpiece (Figure 2, items 8 and 9).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 03-254359 (Akio) as applied to Claim 9 above and further in view of US 6,396,025 (Pyritz et al.). Pyritz et al. teach depositing powder from a nozzle into a molten puddle on the workpiece in a patterned layerwise fashion and focusing a laser on the workpiece to form the molten puddle. (Figure 6, item 134). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the brazing deposition step of Akio to utilize depositing powder from a nozzle into a molten puddle on the workpiece in a patterned layerwise fashion in order to ensure the braze material is deposited in the proper location (Pyritz et al. col. 1, ll. 14-46).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP 03-254359 (Akio) as applied to Claim 9 above and further in view of US 5,460,317 (Thomas et al.). Thomas et al. teach friction stir welding edges of the workpiece to form a pipe (col. 1, ll. 55-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pipe joining step of Akio to utilize friction stir welding the edges of the pipe in order to prevent bond defects (see Thomas et al. col. 3, ll. 5-15).

#### *Allowable Subject Matter*

Claim 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The following is an examiner's statement of reasons for allowance: The prior art does not suggest or teach a method of fabricating an article,

,particularly axially splitting the tubular metal workpiece to form workpiece sections; machining the deposited features on the workpiece sections; and joining the workpiece sections to form the tubular shaped article with deposited features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 571-272-1177. The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jonathan Johnson  
Examiner  
Art Unit 1725

jj